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 ED Entered STN: 23 Aug 2000  
 TI Synthesis and properties of anthracene containing polyethers  
 AU Sinigersky, Vesselin; Mullen, Klaus; Klapper, Markus; Schopov, Ivan  
 CS Institute of Polymers, Bulgarian Academy of Sciences, Sofia, BG-113, Bulg.  
 SO Macromolecular Chemistry and Physics (2000), 201(11), 1134-1140  
 CODEN: MCHPES; ISSN: 1022-1352  
 PB Wiley-VCH Verlag GmbH  
 DT Journal  
 LA English  
 CC 35-5 (Chemistry of Synthetic High Polymers)  
 AB Four poly(oxymethyleneanthrylene)s were prepared by polycondensation of 9,10-diacetoxyanthracene (and a substituted analog) with  $\alpha,\omega$ -dibromoalkanes. Two model compds. were also synthesized by the same procedure. Although non-conjugated the polymers could be doped with iodine. The redox reaction of doping was confirmed by the changes in the electronic and fluorescence spectra as well as by the appearance of paramagnetism and enhanced elec. conductivity. In comparison, the model compds. could not be doped. Doping with iodine occurs only when the polymers are in the solid state. This solid state polymer effect, reported also in previous publications, is explained by collective interactions of several anthracene units with the dopant.  
 ST anthracene polyether iodine doped prepn property; acetoxyanthracene bromoalkane polymn  
 IT Polyethers, preparation  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (anthracene-containing; synthesis and properties of anthracene containing polyethers from 9,10-diacetoxyanthracene or substituted analog with  $\alpha,\omega$ -dibromoalkanes)  
 IT Spectra (electronic; synthesis and properties of anthracene containing polyethers from 9,10-diacetoxyanthracene or substituted analog with  $\alpha,\omega$ -dibromoalkanes)  
 IT Electric conductivity (synthesis and properties of anthracene containing polyethers from 9,10-diacetoxyanthracene or substituted analog with  $\alpha,\omega$ -dibromoalkanes)  
 IT 7553-56-2, Iodine, uses  
 RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (dopant; synthesis and properties of anthracene containing polyethers from 9,10-diacetoxyanthracene or substituted analog with  $\alpha,\omega$ -dibromoalkanes)  
 IT 90178-20-4P 301172-49-6P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (model; synthesis and properties of anthracene containing polyethers from 9,10-diacetoxyanthracene or substituted analog with  $\alpha,\omega$ -dibromoalkanes)  
 IT 83174-57-6P 301172-38-3P 301172-39-4P 301172-40-7P 301172-41-8P 301172-45-2P 301172-47-4P 301172-48-5P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis and properties of anthracene containing polyethers from 9,10-diacetoxyanthracene or substituted analog with  $\alpha,\omega$ -dibromoalkanes)  
 IT 84-60-6, 2,6-Dihydroxyanthraquinone 108-24-7, Acetic anhydride 111-83-1, 1-Bromooctane 604-66-0, 9,10-Diacetoxyanthracene 272441-67-5  
 RL: RCT (Reactant); RACT (Reactant or reagent) (synthesis and properties of anthracene containing polyethers from 9,10-diacetoxyanthracene or substituted analog with  $\alpha,\omega$ -dibromoalkanes)  
 IT 301172-46-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(synthesis and properties of anthracene containing polyethers from  
9,10-diacetoxyanthracene or substituted analog with  
 $\alpha,\omega$ -dibromoalkanes)

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OS.G CAPLUS 2009:1120426; 2009:333485; 2008:23175; 2006:759246; 2004:1007683

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RE CITED REFERENCES

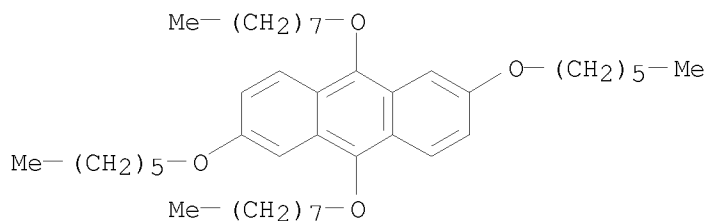
- (1) Anon; GB 1128986 CAPLUS
- (2) Anon; US 34311221 CAPLUS
- (3) Anon; JP 71-02032 CAPLUS
- (4) Bartz, T; Polymer Inter 1993, V31, P153 CAPLUS
- (5) Baumgarten, M; Angew Chem 1992, V104, P482 CAPLUS
- (6) Becker, B; J Am Chem Soc 1991, V113, P1121 CAPLUS
- (7) Bender, D; Makromol Chem 1989, V190, P2071 CAPLUS
- (8) Berlin, A; Dokl Akad Nauk SSSR 1964, V156, P1371 CAPLUS
- (9) Berlin, A; Vysokomol Soed 1967, V9B, P423
- (10) Berlin, A; Vysokomol Soed 1968, VA10, P2310
- (11) Berlin, A; Vysokomol Soed A 1970, V12, P1497 CAPLUS
- (12) Bouas-Laurent, H; Pure Appl Chem 1980, V52, P2633 CAPLUS
- (13) Gabes, W; Spectrochim Acta Part A 1974, V30, P1835
- (14) Hinterhofer, O; Makromol Chem 1980, V181, P67 CAPLUS
- (15) Houben-Weyl; Methoden der Organischen Chemie 1979, V7/3c, P273
- (16) Kim, O; Mol Liq Cryst 1984, V105, P161 CAPLUS
- (17) Labes, M; J Am Chem Soc 1963, V85, P2055 CAPLUS
- (18) Matzuyama, Y; Makromol Chem 1975, V176, P1657
- (19) Muller, U; Makromol Rapid Commun 1994, V15, P45
- (20) Paul, S; Acta Polymer 1996, V47, P92 CAPLUS
- (21) Paul, S; Thin Solid Films 1996, V288, P150 CAPLUS
- (22) Percec, V; J Polym Sci Part A 1987, V25, P1943 CAPLUS
- (23) Scheich, H; Dissertation J Gutenberg University 1992
- (24) Schopov, I; Macromol Symp 1997, V121, P35 CAPLUS
- (25) Schopov, I; Makromol Chem 1992, V193, P1839 CAPLUS
- (26) Schopov, I; Polym Comm 1987, V28, P35
- (27) Schopov, I; Polymer 1978, V19, P1449 CAPLUS
- (28) Schopov, I; Polymer 1982, V23, P613 CAPLUS
- (29) Schulz, R; Pure Appl Chem 1972, V30, P239 CAPLUS
- (30) Shumov, V; Neft Gazov Ickh Produktov 1971, P142 CAPLUS
- (31) Sinigersky, V; Macromol Chem Phys 1996, V197, P1713 CAPLUS
- (32) Sinigersky, V; Macromol Chem Phys 1997, V198, P919 CAPLUS
- (33) Stein, S; Acta Polymer 1996, V47, P85 CAPLUS
- (34) Yamamoto, T; Bull Chem Soc Jap 1978, V51, P2091 CAPLUS

IT 301172-49-6P

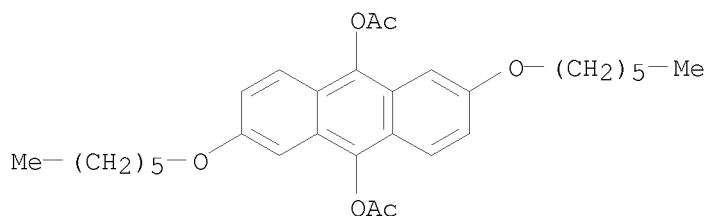
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(model; synthesis and properties of anthracene containing polyethers from  
9,10-diacetoxyanthracene or substituted analog with  
 $\alpha,\omega$ -dibromoalkanes)

RN 301172-49-6 CAPLUS

CN Anthracene, 2,6-bis(hexyloxy)-9,10-bis(octyloxy)- (CA INDEX NAME)



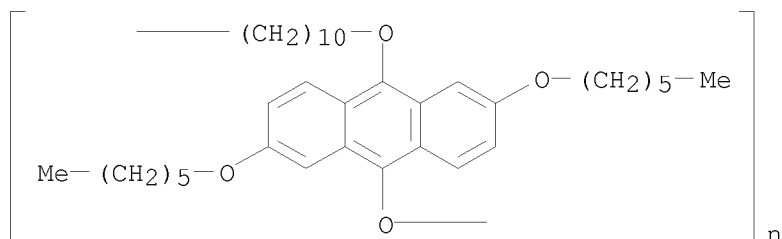
IT 301172-47-4P 301172-48-5P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis and properties of anthracene containing polyethers from  
 9,10-diacetoxyanthracene or substituted analog with  
 $\alpha,\omega$ -dibromoalkanes)  
 RN 301172-47-4 CAPLUS  
 CN 9,10-Anthracenediol, 2,6-bis(hexyloxy)-, diacetate, polymer with  
 1,10-dibromodecane (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 301172-46-3  
 CMF C30 H38 O6



CM 2  
 CRN 4101-68-2  
 CMF C10 H20 Br2

Br-(CH<sub>2</sub>)<sub>10</sub>-Br

RN 301172-48-5 CAPLUS  
 CN Poly[oxy[2,6-bis(hexyloxy)-9,10-anthracenediyl]oxy-1,10-decanediyl] (9CI)  
 (CA INDEX NAME)



IT 301172-46-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (synthesis and properties of anthracene containing polyethers from  
 9,10-diacetoxyanthracene or substituted analog with  
 $\alpha,\omega$ -dibromoalkanes)  
 RN 301172-46-3 CAPLUS  
 CN 9,10-Anthracenediol, 2,6-bis(hexyloxy)-, 9,10-diacetate (CA INDEX NAME)

